TABLE OF CONTENTS

			Page(s)
I.	INT	RODUCTION	1
II.	EXI	STING CONDITIONS	3
	A.	Major Roadways in the Study Area	3
	B.	Generalized Land Use	8
	C.	Traffic Volumes	9
	D.	Queues at Critical Intersections	14
	E.	Existing Levels of Service	18
	F.	Speed and Travel Times	20
	G.	Generalized Origin-Destination Analysis	25
	H.	Accident Summary	33
	I.	Public Transportation	34
	J.	Pedestrian and Bicycle Facilities	41
	K.	Parking Inventory and Utilization	44
III.	REI	LATED STUDIES	50
	A.	Comprehensive Plan, District of Columbia, Revised 1999	50
	B.	District of Columbia Strategic Neighborhood Action Plan –	
		Neighborhood Cluster 34, Summer 2002 / District of	
		Columbia Strategic Neighborhood Action Plan –	
		Neighborhood Cluster 35, Summer 2002	50
	C.	Memorials and Museums Master Plan, September 2001	50
	D.	Anacostia Waterfront Initiative	51
	E.	Middle Anacostia Crossings Transportation Study	51
	F.	Regional Bus Study, September 2002	51
	G.	District of Columbia Transit Development Study	52
	H.	Pennsylvania Avenue Scenic Byway Corridor Management	
		Plan – Draft Report, June 2002	52
IV.	PRO	POSED CONDITIONS	53
V.	SHC	ORT-TERM OPTIONS	56
	A.	Community Cohesiveness and Amenities	56
		1. Reduce Speeds – Place Variable Speed Display	56
		2. Signs – Replace Regulatory Signs along Pennsylvania	
		Avenue. SE	57

			Page(s)
	3.	Parking – Clarify Signing Regarding Restrictions/	0
		Regulations	58
	4.	Signs – Extend Wayfinding Signs	59
		, , ,	
В.	Community Circulation		
	1.	Signals – Improve Signal Timing within Study Area	60
	2.	Signals – Complete Detailed Signal Warrant Analysis	
		and Install Signal if Warranted at Pennsylvania	
		Avenue, SE/Texas Avenue	60
	3.	Pavement Marking – Northbound Branch	
		Avenue Improvements	61
	4.	Channelization – Create Right-in, Right-out Only	
		at Fairlawn Avenue	63
	5.	Signals – Repair Loop Detectors at Pennsylvania	
		Avenue, SE/ Southern Avenue	64
	6.	Turn Lane Lengths – Increase Turn Lane Lengths to	
		Accommodate Turning Volumes	64
	7.	Enforcement – Discuss Existing Issues with Local Law	
		Enforcement	65
C.	Pedestrian Accessibility and Transit Facilities		65
	1.	Signs – Repair Damaged School Flashers at	
		Randle Highlands Elementary School	65
	2.	Pedestrians – Complete Sidewalk Network	
		Within Study Area	66
	3.	Pedestrians – Review Pedestrian Signals and Timing	67
	4.	Pedestrians – Provide for ADA Compliance	68
	5.	Signs – Place Signs in Maryland Encouraging Transit	
		and Carpool Use	69
	6.	Transit – Repair Damaged Facilities	69
	7.	Bicycle Lanes – Provide Signage Directing bicyclists to	0,
	, .	a Route through the Area	69
	8.	Pedestrian – Repair Damaged Pedestrian Signal at	0,
	0.	Pennsylvania Avenue, SE/31 st Street	71
		1 omisylvania livonac, S2,81 Scient	, 1
D.	Overall Circulation of Pennsylvania Avenue, SE		71
	1.	Median Improvements - Modify Median at Pennsylvania	
		Avenue, SE/ southbound Minnesota Avenue	72
	2.	Median Improvements - Close Median Barrier at CSX	, _
		Rail Lines	72
	3.	Reversible Lane – Improve Signage along	, 2
	٥.	Pennsylvania Avenue, SE	74
	4.	Roadway Improvements – Pave Over CSX Rail Lines	74

		I	Page(s)
		5. Pavement Markings – Increase the Storage Length for Eastbound Pennsylvania Avenue, SE Left Turns to the Northbound Anacostia Freeway (I-295) On-Ramp	75
		6. Pavement Markings – Change Lane Configuration at Pennsylvania Avenue, SE/ Southern Avenue	78
		7. Intersection Improvements – Correct Eastbound Transition at the Intersection of Pennsylvania Avenue, SE/Branch Avenue	79
VI.	LON	G-TERM OPTIONS	81
	A.	Community Cohesiveness and Amenities 1. Streetscape – Provide Streetscape Amenities	81
		 along the Corridor Safety – Place Red Light Running Cameras at Intersections 	81 83
	B.	Community Circulation 1. Traffic Calming – Place Devices in Neighborhoods to	83
		Deter Cut-Through Traffic Intersection Geometrics – Simplify and Create Better	84
		Efficiency at the Intersection of Pennsylvania Avenue, SE/ Minnesota Avenue/ 25 th Street	85
	C.	Pedestrian Accessibility and Transit Facilities 1. Pedestrians – Place Textured Crosswalks at	88
		 Intersections with Pedestrian Amenities Intersection Improvements – Simplify to Create Better 	88
		Pedestrian Access at the Intersection of Pennsylvania Avenue, SE/31 st Street 3. Intersection Improvements – Simplify to Create Better	90
		Pedestrian Access at the Intersection of Pennsylvania Avenue, SE/ 29 th Street/ 28 th Place	91
	D.	Overall Circulation of Pennsylvania Avenue, SE 1. Reversible Lane – Place Overhead Signs and Prohibit	93
		Left Turns 2. Interchange Configuration – Place Directional Ramp	93
		on the Northwestern Quadrant of Pennsylvania Avenue, SE/ Anacostia Freeway (I-295) Interchange 3. Interchange Configuration – Place a Single Point	94
		Urban Diamond Interchange at Pennsylvania Avenue, SE/Anacostia Freeway (I-295) Interchange	96

/II.	OPTI	ONS STUDIED BUT NOT PURSUED	Page(s) 99
	A.	Short Term Options	99
		1. COMMUNITY CIRCULATION: Roadway	
		Improvements – Create a Free Flowing Eastbound	
		Right Turn Lane onto Branch Avenue	99
		2. COMMUNITY CIRCULATION: Traffic Calming –	
		Close Fairlawn Avenue to Deter Cut-Through Traffic	101
		3. COMMUNITY CIRCULATION: Turn Lane Lengths –	
		Increase Turn Lane Lengths to Accommodate Turning	100
		Volumes	102
	B.	Long Term Options	103
	Б.	1. PEDESTRIAN ACCESSIBILITY AND TRANSIT	103
		FACILITIES: Transit – Provide Buss Pull-over Lane	
		at L'Enfant Square	103
		2. PEDESTRIAN ACCESSIBILITY AND TRANSIT	
		FACILITIES: Transit – Provide Westbound HOV Lanes	
		During the AM Peak Hour	104
		3. OVERALL CIRCULATION OF PENNSYLVANIA	
		AVENUE, SE: Reversible Lanes – Revise operations	104
		4. OVERALL CIRCULATION OF PENNSYLVANIA	
		AVENUE, SE: Interchange Configurations – Place Loop)
		Ramp on the Southeastern Quadrant of Pennsylvania	40=
		Avenue, SE/Anacostia Freeway (I-295) Interchange	105
APPE	ENDIC	ES	

A

Appendix A: Level of Service Definition Appendix B: Existing Capacity Analysis Appendix C: Accident Summary Appendix D: Transit Ridership Data Appendix E: 2025 No-Build Capacity Analysis Appendix F: **Public Comments and Meeting Minutes** Appendix G: CSX Corporation Letter Appendix H: Signalized Analysis at Pennsylvania Avenue, SE/Minnesota Avenue Appendix I: Signalized Analysis at Pennsylvania Avenue, SE/Branch Avenue

LIST OF FIGURES

FIGURES		Page(s)
Figure 1.	Project Location Map	2
Figure 2a.	Flow Patterns (Sheet 1 of 2)	6
Figure 2b.	Flow Patterns (Sheet 2 of 2)	7
Figure 3.	Existing Traffic Volumes	11
Figure 4.	Average Daily Traffic Volumes by Day of the Week between	
-	Branch Avenue and Alabama Avenue	12
Figure 5a.	Significant Queues (Sheet 1 of 2)	16
Figure 5b.	Significant Queues (Sheet 2 of 2)	17
Figure 6.	Level of Service	19
Figure 7.	Pennsylvania Avenue, SE – West of Alabama Avenue	
	Eastbound Average Speed	21
Figure 8.	Pennsylvania Avenue, SE – West of Branch Avenue	
-	Eastbound Average Speed	22
Figure 9.	Pennsylvania Avenue, SE – West of Alabama Avenue	
-	Westbound Average Speed	22
Figure 10.	Pennsylvania Avenue, SE – West of Branch Avenue	
	Westbound Average Speed	23
Figure 11.	Pennsylvania Avenue, SE – West of Alabama Avenue	
	Eastbound Average Speed on a Weekday	23
Figure 12.	Pennsylvania Avenue, SE – West of Branch Avenue	
	Eastbound Average Speed on a Weekday	24
Figure 13.	Pennsylvania Avenue, SE – West of Alabama Avenue	
	Westbound Average Speed on a Weekday	24
Figure 14.	Pennsylvania Avenue, SE – West of Branch Avenue	
	Westbound Average Speed on a Weekday	25
Figure 15.	Origin-Destination Study: Pennsylvania Avenue, SE @	
	Maryland Border	27
Figure 16.	Origin-Destination Study: Northbound Branch Avenue	28
Figure 17.	Origin-Destination Study: Northbound 27 th Street	29
Figure 18.	Origin-Destination Study: Northbound Minnesota Avenue	30
Figure 19.	Origin-Destination Study: Southbound Minnesota Avenue	31
Figure 20.	Origin-Destination Study: 1-295 Southbound Ramp u-turn to	
	Southbound I-395	32
Figure 21.	Transit Routes	35
Figure 22a.	Pedestrian and Bicycle Information (Sheet 1 of 2)	42
Figure 22b.	Pedestrian and Bicycle Information (Sheet 2 of 2)	43
Figure 23a.	Parking Utilization (Sheet 1 of 4)	46
Figure 23b.	Parking Utilization (Sheet 2 of 4)	47
Figure 23c.	Parking Utilization (Sheet 3 of 4)	48
Figure 23d.	Parking Utilization (Sheet 4 of 4)	49
Figure 24.	2025 No Build Traffic Volumes	53
Figure 25.	2025 Level of Service	54
Figure 26.	Proposed traffic signal and pedestrian improvements at Pennsylvania	
	Avenue, SE/Texas Avenue	61

FIGURES		Page(s)
Figure 27.	Restripe and resign Northbound Branch Avenue to accommodate	0 , ,
	left turn queues	62
Figure 28.	Short-term improvements at Pennsylvania Avenue, SE/	
	northbound Fairlawn Avenue	63
Figure 29.	Bike route to be signed through the study area	70
Figure 30.	Location of pedestrian signal to be repaired	71
Figure 31.	Median modifications to deter illegal u-turns at Pennsylvania	
	Avenue, SE/ southbound Minnesota Avenue	72
Figure 32.	Close the gap at the existing CSX railroad to prohibit illegal	
	u-turns at this location	73
Figure 33.	Area to be paved over decommissioned railroad tracks	75
Figure 34.	Various signing and pavement changes are needed to designate	
	the northern-most lane as a left turn only lane	77
Figure 35.	Change lane configurations at Pennsylvania Avenue, SE/	
	Southern Avenue	74
Figure 36.	Eastbound Transition at Branch Avenue	79
Figure 37.	Reconfiguration of Pennsylvania Avenue, SE/ Minnesota Avenue/	
	25 th Street Intersection	86
Figure 38.	The realignment of Pennsylvania Avenue, SE/31 st Street	90
Figure 39.	The realignment of Pennsylvania Avenue, SE/29 th Street/28 th Place	91
Figure 40.	Exit Ramp from Southbound Anacostia Freeway (I-295) to Westbound	
	Pennsylvania Avenue, SE	95
Figure 41.	Single Point Urban Diamond interchange at Anacostia Freeway (I-295)	/
	Pennsylvania Avenue, SE Figure	97
Figure 42.	Establish an eastbound free flowing right turn onto Branch Avenue	100
Figure 43.	Bollards closing Fairlawn Avenue to cut-through traffic	101
Figure 44.	Bus Pull-Over Lanes at L'Enfant Square	103
Figure 45.	Loop Ramp from Eastbound Pennsylvania Avenue, SE to	
	Northbound Anacostia Freeway (I-295)	106

LIST OF TABLES

TABLES		Page(s)
Table 1.	Vehicle Classification – Eastbound Pennsylvania Avenue, SE	0 . ,
	between Branch Avenue and Alabama Avenue	13
Table 2.	Vehicle Classification – Westbound Pennsylvania Avenue, SE	
	between Branch Avenue and Alabama Avenue	14
Table 3.	Pennsylvania Avenue, SE Spot Speed Study Results (Non-Peak Hours)) 20
Table 4.	Bus Stop Amenities Required Based on Boardings	37
Table 5.	Bus Stop Amenities for Bus Stops located along Eastbound	
	Pennsylvania Avenue, SE	38
Table 6.	Bus Stop Amenities for Bus Stops located along Westbound	
	Pennsylvania Avenue, SE	39
Table 7.	Bus Stop Amenities for Bus Stops located along Side Streets	40